



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,783	05/14/2001	Kristen Lynne McKenzie	7341	9667
27752 7590 01/19/2007 THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION WINTON HILL BUSINESS CENTER - BOX 161 6110 CENTER HILL AVENUE CINCINNATI, OH 45224			EXAMINER GUIDOTTI, LAURA COLE	
			ART UNIT	PAPER NUMBER
			1744	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/19/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/831,783

Applicant(s)

MCKENZIE ET AL.

Examiner

Laura C. Guidotti

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-39 and 42-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-39 and 42-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 33-39, 42-52, and 55-56 are rejected under 35 U.S.C. 103(a) as obvious over Sawyer, USPN 3,357,033 in view of Bock, USPN 5,369,831.

Sawyer discloses a sonic surface cleaner that comprises a housing (Figures 1-3), a gripping means (Figure 1 (12)), a cleaning head (Figures 1-3 (30)) that is adapted to be removably mounted to the housing (Column 2 Lines 52-57 and Column 3 Lines 33-41) wherein the cleaning head is interchangeable (Column 2 Lines 52-57 and Column 3 Lines 33-41), a transducer means mounted in the housing for oscillating (Column 4 Lines 17-22 disclose that the energy generated is "transformed" into sound waves and

Art Unit: 1744

releases that energy at the surface as sonic Column 4 Lines 22-36) that is of a frequency in the *lower sonic range* and has a cleaning effect “analogous to the implosion effect produced by ultrasonic wave energy” (Column 4 Lines 69-72), and a power supply means (from wires (55) and (56) that lead to a cap (60), Column 3 Lines 10-18, and by Figure 1 appear to connect to a cord that would go to an outlet.) The gripping means is at a proximal end while the cleaning head is at a distal end (Figure 1). The device further comprises at least one solution storage means (Figure 1 (72) that contains a cleaning composition for cleaning, and a dispensing means (Figure 1 (71)) mounted in the housing for supplying the cleaning composition (Column 3 Lines 22-32). The cleaning head may be a sponge (Figure 3) so that the cleaning liquid is supplied to a surface that is coterminous (Figure 2) with the head in that the absorbent sponge portions disperse the liquid. The “second” housing is the housing labeled (11) in Figures 1-3 wherein the “first” housing is the liquid supply (Figure 1 (72)). Further, the device of Sawyer may contain a surfactant in the reservoir (specifically a detergent, Column 5 Lines 42-43). Sawyer also discloses a method for removing soil from a hard surface that contacts the soil with a liquid and cleaning head and imparting ultrasonic energy to it (Column 4 Line 73 to Column 5 Line 18 states that a cleaning composition or detergent is put into contact with a soil, then loosening the soil, and then rinsing the amount with water.) Sawyer does not disclose having a cleaning head surface area greater than *about* 6.25 cm² (although it appears in Figure 1 that the surface head is of at least a certain size to efficiently clean a floor surface) or having a power output of at least 0.02 watts/cm² (or alternatively, Sawyer states that there is a motor output of

Art Unit: 1744

between 45 and 70 watts in Column 3 Lines 53-54, so the maximum surface area to have a power output of 0.02 watts/cm² is 3500 cm² or in other words for a power output of at least 0.02 watts/cm² the largest the cleaning surface area could possibly be is 3500 cm²). Sawyer does not disclose that the cleaning head oscillates at a frequency from about 1000 Hz to about 100 kHz.

Bock discloses a therapeutic ultrasonic toothbrush that comprises a housing (22), a gripping means (Figure 1 (gripping portion of 22)), a cleaning head (Figures 1-3 (32)) that is adapted to be removably mounted to the housing and is capable of being interchangeable (Figure 2; Column 3 Line 6), a transducer means mounted in the housing for oscillating (Figure 1 (28); Column 3 Lines 10-18), and a power supply means which is mounted in the housing (Figure 1 (24)). The gripping means is at a proximal end while the cleaning head is at a distal end (Figures 1-3). The transducer means has an average ultrasonic oscillating frequency of from about 1000 Hz to about 100 kHz, (Title states that the device is "ultrasonic", Column 2 Lines 66-68, wherein "ultrasonic" is defined as "designating or a frequency of mechanical vibrations above the range audible to the human ear, i.e., above 20,000 vibrations per second" according to *The Webster's New World Dictionary of American English, Third College Edition Copyright © 1988 by Simon & Schuster, Inc.*, therefore wherein 20,000 vibrations per second is converted into Hertz, it is 20,000 Hz or 20 kHz).

It would have been obvious for one of ordinary skill in the art to have the transducer of Sawyer modified to create an ultrasonic oscillating frequency of 20 kHz, as Bock teaches, in order to have a more sufficient cleaning energy to remove debris

Art Unit: 1744

from a surface and it would have been obvious to one of ordinary skill in the art to construct a cleaning head for a sonic surface cleaner that is used for a floor to have a cleaning head surface area greater than 6.25 cm^2 and having a power output of at least 0.02 watts/cm^2 because it would be desirable to have a larger cleaning surface area to reduce the time it takes to clean an area, to reduce the human effort in cleaning a large surface, and the increased surface area and an increased output of power is most efficient for cleaning a large area. Furthermore, MPEP 2144.04 IV A states "In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device."

2. Claims 53, 54, 57, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawyer, USPN 3,357,033 in view of Bock, USPN 5,369,831.

Sawyer and Bock disclose all elements regarding the device as stated above however do not disclose instructions for using the product.

It would have been obvious for one of ordinary skill in the art to provide operating instructions, as it is well known in marketing and business to provide instructions for use of a product to protect the buyer and user.

Response to Arguments

Art Unit: 1744

3. Applicant's arguments filed 26 October 2006 have been fully considered but they are not persuasive.

Regarding Sawyer, the Applicant did not understand how the Examiner arrived at the calculation described above regarding the maximum surface area of the cleaning head. Sawyer states that the motor has an output of between 45 and 70 watts. For this device to have a power output of *at least* 0.02 watts/cm^2 , it can be simply calculated that the area at most can be 3500 cm^2 , when the motor has its maximum output of 70 watts (0.02 watts/cm^2 equals 70 watts divided by 3500 cm^2). Regardless, the Applicant has not taught or disclosed as to how the power output value or area of the cleaning head is critical. Therefore, it would have been obvious to one of ordinary skill in the art to construct a cleaning head for a sonic surface cleaner that is used for a floor to have a cleaning head surface area greater than 6.25 cm^2 and having a power output of at least 0.02 watts/cm^2 because it would be desirable to have a larger cleaning surface area to reduce the time it takes to clean an area, to reduce the human effort in cleaning a large surface, and because the increased surface area and an increased output of power is most efficient for cleaning a large area. Furthermore, MPEP 2144.04 IV A states "In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, *where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.*"

Art Unit: 1744

Regarding Bock, the transducer means has an average ultrasonic oscillating frequency of from about 1000 Hz to about 100 kHz in that the Title states that the device is "ultrasonic" in Column 2 Lines 66-68, wherein "ultrasonic" is defined as "designating or a frequency of mechanical vibrations above the range audible to the human ear, i.e., above 20,000 vibrations per second" according to *The Webster's New World Dictionary of American English, Third College Edition Copyright © 1988 by Simon & Schuster, Inc.*, so therefore when 20,000 vibrations per second is converted into Hertz, it is 20,000 Hz or 20 kHz (and thus falls in the range of "about 1000 Hz to about 100 kHz). Also, Bock teaches in Column 3 Lines 10-25 that the transducer means 28, is capable of having an average oscillating frequency from about 1000 Hz to about 100 kHz in that it is ultrasonic (see definition above). In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-

Art Unit: 1744

1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Laura C Guidotti
Patent Examiner
Art Unit 1744

lcg